

Abstract of the Disclosure

The invention relates to an optical device (50) for manipulating a light wave (λ) using a diffractive grating structure (G). According to the basic idea behind the invention a prior art type diffractive grating structure having a permanently shaped surface relief is substituted with an electrically deformable diffractive grating structure (G), where a preformed, basic surface relief of the grating is composed of dielectric and deformable viscoelastic material, which can be electrically and sequentially fine tuned in shape to adjust the diffraction properties of said grating individually for different wavelengths. The invention permits manufacture of virtual display devices with a significantly larger exit pupil diameter than prior art solutions without degrading the color uniformity of the display device.